

Initial Deliverability
Test

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Pool Basin Formation Dakota County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed January 9, 1961
Operator Skelly Oil Company Lease Farming "R" Well No. 3
Unit K Sec. 2 Twp. 24N Rge. 6W Pay Zone: From 6612 To 6682
Casing: OD 5 1/2" WT. 14.415# Set At 6857 Tubing: OD 2-1/16" WT. 3.4# T. Perf. 6589
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .645 Estimated _____
Date of Flow Test: From 12-15-60 To 12-22-60 * Date S.I.P. Measured August 30, 1960
Meter Run Size 4" Orifice Size 1.250 Type Chart S R Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = _____ psia (b)
Flowing meter pressure (Dwt) _____ psig + 12 = _____ psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (_____) ² x spring constant _____ = _____ psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = _____ psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.00) ² x sp. const. 10.00 = 490 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 490 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 2224 psig + 12 = 2236 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2236 psia (l)
Flowing Temp. (Meter Run) 81 °F + 460 _____ = 541 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1118 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{_____}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 898 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{3,749,772}{4,717,457} \cdot \frac{.75}{.8418} = \text{_____}$ MCF/da.

SUMMARY

P_c = 2236 psia Company Skelly Oil Company
Q = 898 Mcf/day By _____
P_w = 531 psia Title District Superintendent
P_d = 1118 psia Witnessed by _____
D = 756 Mcf/day Company _____

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4230</u>	<u>0.266</u>	<u>158.417</u>	<u>42.139</u>	<u>240.100</u>	<u>242.239</u>	<u>531</u>

